

WHAT IS CLAIMED IS:

1. A toothbrush comprising a handle, a head connected to said handle, said head having a longitudinal axis and a cleaning surface, at least one elongated shaft rotatably mounted to said cleaning surface parallel to said longitudinal axis, said shaft extending over a major portion of the length of said head, a plurality of cleaning elements mounted to and extending outwardly from said shaft, and said cleaning elements being disposed at an angle which is non-perpendicular to said shaft.
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2. The toothbrush of claim 1 wherein said head is in the form of an open frame having a centrally located open area, and said cleaning elements being located at said open area.
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3. The toothbrush of claim 2 wherein said head has a back side opposite said cleaning surface, a shield being mounted to said back side across said open area outwardly beyond said cleaning elements, and said shield being of open construction to permit water and residue to flow through said shield.
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4. The toothbrush of claim 2 wherein said shaft and said cleaning elements are in the form of a roller having said cleaning elements located continuously along the length of said shaft.
- 20 5. The toothbrush of claim 1 wherein said shaft is detachably mounted in bearings secured to said cleaning surface of said head.
6. The toothbrush of claim 1 wherein said shaft is in the form of a bent wire spirally wound around itself, and said cleaning elements being fiber

bristles extending through said bent wire.

7. The toothbrush of claim 6 wherein said cleaning elements are arranged along the length of said wire in a non-uniform density.
8. The toothbrush of claim 1 wherein said cleaning elements are arranged as
5 sets of spaced wheels along said shaft.
9. The toothbrush of claim 1 wherein there are two of said shafts disposed parallel to each other with each of said shafts having said cleaning elements mounted thereon.
10. The toothbrush of claim 9 wherein said cleaning elements of one of said
10 shafts are disposed at an angle which is the mirror image of said cleaning elements on the other of said shafts and with said angle being the same for said cleaning elements on both of said shafts.
11. The toothbrush of claim 9 wherein said cleaning elements are disposed at generally the same angle in generally the same direction as each other.
- 15 12. The toothbrush of claim 9 wherein said cleaning elements on said shafts are disposed in generally the same direction and at different angles from each other.
13. The toothbrush of claim 9 wherein said cleaning elements on said shafts are disposed in generally opposite directions at different angles from each
20 other.
14. The toothbrush of claim 9 wherein said cleaning elements on one of said shafts are of a different length than said cleaning elements on the other of said shafts.

15. The toothbrush of claim 9 wherein said shaft is power driven by a power drive in said handle.
16. The toothbrush of claim 15 wherein said shafts rotate in opposite directions to each other.
- 5 17. The toothbrush of claim 15 including a third rotatably mounted shaft mounted to said cleaning surface parallel to said two shafts.
18. The toothbrush of claim 9 wherein said cleaning elements are in the form of sets of wheels spaced from each other along the length of said shafts.
19. The toothbrush of claim 9 wherein each of said shafts and its said
10 cleaning elements is in the form of a roller having said cleaning elements mounted continuously along the length of said shaft, and said cleaning elements being bristles.
20. The toothbrush of claim 19 wherein said cleaning elements are arranged along the length of said shaft in a non-uniform density.
- 15 21. The toothbrush of claim 9 wherein said cleaning elements on said shafts is a different type than said cleaning elements on the other of said shafts.
22. The toothbrush of claim 21 wherein said cleaning elements on one of said shafts is in the form of fiber bristles, and said cleaning elements are on the other of said shafts being in the form of elastomeric walls or fingers.
- 20 23. The toothbrush of claim 1 wherein said shaft and said cleaning elements is in the form of a roller having said cleaning elements disposed continuously along the length of said roller, and said cleaning elements being bristles.

24. The toothbrush of claim 1 wherein said solid shaft is a cylindrical core
and said cleaning elements are spikes extending outwardly from said core.
25. The toothbrush of claim 1 wherein said cleaning elements are elastomeric
pads.
- 5 26. The toothbrush of claim 1 wherein a plurality of wheels are mounted to
said shaft parallel to said cleaning elements, and each set of said cleaning
elements being located between a pair of adjacent wheels.
27. The toothbrush of claim 1 wherein said cleaning elements are sets of
cleaning elements mounted to and extending outwardly of sets of wheels
10 mounted on said shaft.
28. The toothbrush of claim 27 wherein each set of said cleaning elements is
spikes molded integral with a respective one of said wheels and made
from the same elastomeric material.
29. The toothbrush of claim 27 wherein each set of said cleaning elements is
15 spikes molded to its respective wheel, and said spikes being made from an
elastomer material which is softer than the elastomer material of said
wheels.
30. The toothbrush of claim 1 wherein said toothbrush is a manual
toothbrush.
- 20 31. The toothbrush of claim 1 wherein said toothbrush is a power toothbrush.
32. A toothbrush comprising a handle, the head connected to said handle, said
head having a longitudinal axis and a cleaning surface, at least one
elongated shaft rotatably mounted to said cleaning surface parallel to said

longitudinal axis, said shaft extending over a major portion of the length of said head, a plurality of cleaning elements mounted to and extending outwardly from said shaft, said head being in the form of an open frame having a central open area, said shaft being mounted longitudinally across said frame with said cleaning elements disposed at said open area, and said cleaning elements and said shaft comprising a roller wherein said cleaning elements extend continuously across a major portion of the length of said shaft.

33. The toothbrush of claim 32 wherein said shaft is in the form of a bent wire, and said cleaning elements are fiber bristles extending through said wire.

34. The toothbrush of claim 32 wherein said head has a back side opposite said cleaning surface, a shield being mounted to said back side across said open area outwardly beyond said cleaning elements, and said shield being of open construction to permit water and residue to flow through said shield.

35. The toothbrush of claim 32 wherein said shaft is power driven.

36. The toothbrush of claim 35 including two of said shafts being in roller form and being power driven.

37. The toothbrush of claim 35 wherein there are three of said shafts each of which is power driven.

38. The toothbrush of claim 32 wherein said cleaning elements are fiber bristles.

39. The toothbrush of claim 32 wherein said cleaning elements are elastomeric pads.
40. The toothbrush of claim 32 wherein said shaft is an injection molded core, and said cleaning elements being integral soft spikes.
- 5 41. The toothbrush of claim 40 wherein said spikes are made of an elastomer material which is softer than the elastomer material of said core.

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